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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,325	10/20/2003	Kosei Yamamoto	SZK.0021US (1353-US)	2861
7590	08/05/2005		EXAMINER	
Timothy N. Trop TROP, PRUNER & HU, P.C. Suite 100 8554 Katy Freeway Houston, TX 77024			NGUYEN, TU MINH	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Taka

**Office Action Summary**

Application No.

10/689,325

Applicant(s)

YAMAMOTO, KOSEI

Examiner

Tu M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413).  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. An Applicant's Amendment filed on July 25, 2005 has been entered. Claims 1-12 have been canceled. Claims 13-14 have been added and are pending in this application.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al. (U.S. Patent 4,916,897).

Re claim 13, as shown in Figure 5, Hayashi et al. disclose a construction for exhaust emission control having an electrically heated catalyst portion (74, 75) a silencer (10) and provided downstream of a main catalyst portion (201) which is disposed near an internal combustion engine in an exhaust gas flow path pipe (71) of an internal combustion engine, wherein:

- the electrically heated catalyst portion is provided so as to penetrate a separator which forms at least two of a first (24) and second (14) expansion chambers by dividing the interior of the silencer (10);

- the electrically heated catalyst portion is formed so as to surround the outer peripheral surface of the exhaust gas flow path pipe (71) which passes through the electrically heated

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catalyst portion in order to warm the exhaust gas in the exhaust gas flow path pipe, the electrically heated catalyst portion being formed in which the downstream end of the exhaust gas flow path pipe (71) which penetrates the electrically heated catalyst portion opens into the second expansion chamber (14) so that the warmed exhaust gas is introduced into the second expansion chamber (14) and that the warmed exhaust gas flows back through the electrically heated catalyst portion disposed at the outer peripheral surface of the exhaust gas flow path pipe in order to introduce the exhaust gas into the first expansion chamber (24), the electrically heated catalyst portion being formed in which the exhaust gas introduced into the first expansion chamber is flowed to the outside (through pipe (36));

- the exhaust gas is warmed to the catalyst activation temperature so that the exhaust gas is controlled by the catalyst in the electrically heated catalyst portion (lines 37-53 of column 8).

Re claim 14, in the construction of Hayashi et al., the exhaust gas flow path pipe introduced into the electrically heated catalyst portion branches into a plurality of exhaust gas flow path pipes (plurality of flow paths within (71)), the plurality of exhaust gas flow path pipe penetrating the electrically heated catalyst portion.

### *Response to Arguments*

4. Applicant's arguments with respect to the reference applied in the previous Office Action have been fully considered but they are not persuasive.

In response to applicant's argument that in Hayashi et al., a rapid rise in the temperature is not required (page 3 of Applicant's Amendment), the examiner respectfully disagrees.

The text on lines 37-46 of column 8 in Hayashi et al. reads "*The regeneration of the smell absorbent 201 can be carried out independently of the regeneration of the filter element 74. In this regeneration of the smell absorbent 201, the exhaust control valve 46 is opened while the inlet control valve 41 is closed, and the electric heater 75 is activated to generate heat. Accordingly, the temperature of the exhaust gas is increased, and thus the unpleasant odor components absorbed or deposited on the smell absorbent 201 are released therefrom or are burned.*" In this operation, the exhaust gas in Hayashi et al. flows into the second chamber (14) and then makes a U-turn to flow back to the first chamber (24) via the paths (71) leading through the electrically heated catalyst (EHC) portion (74, 75). The EHC portion is activated and heats the exhaust gas so that the temperature of the smell absorbent (201) is raised to a level where the absorbed components (unburned HC and particulate matter) are released and burned. Thus, Hayashi et al. clearly utilize the U-turn and the EHC portion within the silencer (10) to impart a rapid rise in the exhaust gas temperature for the regeneration of the smell absorbent.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Communication*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Tu M. Nguyen*

TMN

August 3, 2005

Tu M. Nguyen

Primary Examiner

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